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QLogic Fibre Channel Switch

Alarm Message Guide

Firmware Version 4.1

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Document Revision History

Draft 01, April 9, 2004

Changes	Sections Affected

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First Printed: April 2004
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Section 1

Introduction

This manual describes the alarm messages for the following QLogic of Fibre Channel switch products using firmware version 4.1:

- SANbox 5200
- SANbox2-8c
- SANbox2-16
- SANbox2-64

This manual is organized as follows:

- Section 1 describes the intended audience, related materials, and technical support.
- Section 2 describes event logging concepts including definitions, how to configure the event log, how to display the event log, and how to download the event log from the switch.
- Section 3 describes the alarm message format and lists the alarm messages.

1.1 Intended Audience

This manual is for Storage Area Network (SAN) adminsitrators to provide a reference for switch alarm messages, their meanings, and follow up actions.

1.2 Related Materials

The following manuals and materials provide additional information.

- SANbox 5200 Fibre Channel Switch Installation Guide, publication number 59055-01.
- *SANbox2-8c Fibre Channel Switch Installation Guide*, publication number SB28cIG Pub No
- *SANbox2-16 Fibre Channel Switch Installation Guide*, publication number SB216IG Pub No
- *SANbox2-64 Fibre Channel Switch Installation Guide*, publication number SB264IG Pub No
- SANbox 5200 Switch Management User's Guide, publication number 59056-01

- SANbox2-8c/16 Switch Management User's Guide, publication number 59022-09.
- SANbox2-64 Switch Management User's Guide, publication number 59048-05.

The Fibre Channel Standards are available from:

Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112-5776 Phone: (800) 854-7179 or (303) 397-7956
Fax: (303) 397-2740.

1.3 Technical Support

Customers should contact their authorized maintenance provider for technical support of their QLogic switch products. QLogic-direct customers may contact QLogic Technical Support; others will be redirected to their authorized maintenance provider.

Visit the QLogic support Web site listed in Contact Information for the latest firmware and software updates.

1.3.1 Availability

QLogic Technical Support is available from 7:00 AM to 7:00 PM Central Standard Time, Monday through Friday, excluding QLogic-observed holidays.

1.3.2 Training

QLogic offers certification training for the technical professional for both the SANblade™ HBAs and the SANbox switches. From the training link at www.qlogic.com, you may choose Electronic-Based Training or schedule an intensive "hands-on" Certification course.

Technical Certification courses include installation, maintenance and troubleshooting QLogic SAN products. Upon demonstrating knowledge using live equipment, QLogic awards a certificate identifying the student as a Certified Professional. The training professionals at QLogic may be reached by email at tech.training@qlogic.com.

1.4 Contact Information

Telephone:	+1 952-932-4040
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Technical Service	support@qlogic.com
Technical Training	tech.training@qlogic.com
Switch Support Web Site:	http://support.qlogic.com

Notes

Section 2

Events and Alarms

Messages originate from the switch or from the SANbox Manager application in response to events that occur in the fabric. Events are classified by severity level: critical, warning, and information. Among the critical events are a special class called alarms. Alarms originate on the switch and can be displayed using the SANbox Manager application or the command line interface. Alarm thresholds can be defined for certain port errors to customize when to generate an alarm.

2.1 Event Browser

When you open a SANbox Manager session, the application reads the event log from the switch. SANbox Manager provides an Event Browser with which to display the event log. Entries in the Event Browser are formatted by severity, time stamp, source, type, and description. Alarm entries have a switch time stamp, while other events have a workstation time stamp. When you close a SANbox Manager session, all events in the Event Browser are cleared. To display the Event Browser as shown in Figure 2-1, open the Fabric menu and select **Show Event Browser**, or click the **Events** button on the tool bar.

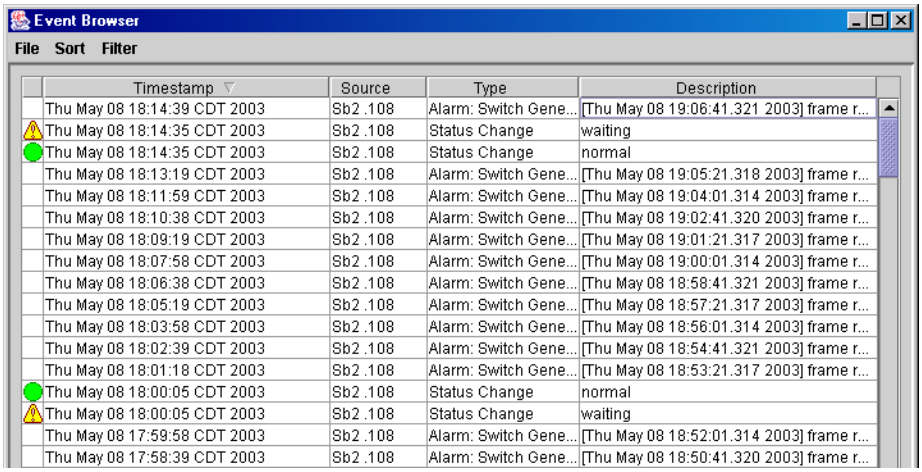
Event Browser
File Sort Filter
Timestamp Source Type Description
Thu May 08 18:14:39 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:06:41.321 2003] frame r...
Thu May 08 18:14:35 CDT 2003 Sb2 .108 Status Change waiting
Thu May 08 18:14:35 CDT 2003 Sb2 .108 Status Change normal
Thu May 08 18:13:19 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:05:21.318 2003] frame r...
Thu May 08 18:11:59 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:04:01.314 2003] frame r...
Thu May 08 18:10:38 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:02:41.320 2003] frame r...
Thu May 08 18:09:19 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:01:21.317 2003] frame r...
Thu May 08 18:07:58 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 19:00:01.314 2003] frame r...
Thu May 08 18:06:38 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:58:41.321 2003] frame r...
Thu May 08 18:05:19 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:57:21.317 2003] frame r...
Thu May 08 18:03:58 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:56:01.314 2003] frame r...
Thu May 08 18:02:39 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:54:41.321 2003] frame r...
Thu May 08 18:01:18 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:53:21.317 2003] frame r...
Thu May 08 18:00:05 CDT 2003 Sb2 .108 Status Change normal
Thu May 08 18:00:05 CDT 2003 Sb2 .108 Status Change waiting
Thu May 08 17:59:58 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:52:01.314 2003] frame r...
Thu May 08 17:58:39 CDT 2003 Sb2 .108 Alarm: Switch Gene... [Thu May 08 18:50:41.320 2003] frame r...

Figure 2-1. Event Browser

The Event Browser can maintain a maximum of 1500 events. Once the maximum is reached, the oldest events are discarded and replaced with new events. For more information about the Event Browser, refer to the Switch Management User's Guide for your switch.

2.2 Displaying the Events Using the Command Line Interface

When you log into a switch through Telnet, the command line interface automatically displays the alarm history. You can use the Show Alarm or Show Log command to display the alarm history at any time. New alarm messages are displayed in the command stream as they occur. Refer to the Installation Guide for your switch for more information about the Show Log command.

2.3 Configuring the Event Log

You can customize what events that are recorded in the switch event log using the Set Log command. With the Set Log command, you can filter the events to be recorded by component, specific ports, and severity level. You can choose from the following component events:

- Chassis events associated with hardware such as fans and power supplies
- E_Port events
- Management server events
- Name server events
- Port events
- Switch management events
- Zoning conflict events

Refer to the Installation Guide for your switch for more information about the Set Log command.

2.4 Archiving and Downloading the Event Log

You can use the command line interface to create a file on the switch that contains the most recent 200 entries plus the previous 1000 entries. This file can then be downloaded to the workstation using FTP. To create and download a log file, do the following:

1. Log into the switch through Telnet and create an archive of the event log. The Set Log Archive command creates a file on the switch named *logfile*.

```
SANbox  #> admin start
SANbox (admin) #> set log archive
```

2. Open an FTP session on the switch and login with the account name *images* and password *images*. Transfer the file *logfile* in binary mode with the Get command.

```
>ftp ip_address
user:images
password: images

ftp>bin
ftp>get logfile
    xxxxx bytes sent in xx secs.
ftp>quit
```

2.5 Configuring Port Alarm Thresholds

You can configure the switch to generate alarms for selected events. Configuring an alarm involves choosing an event type, rising and falling triggers, a sample window, and finally enabling or disabling the alarm. You can configure port alarm thresholds for the following port events using the SANbox Manager or the command line interface:

- CRC errors
- Decode errors
- ISL connections
- Device logins
- Device logouts
- Loss-of-signal errors

To configure port threshold alarms using SANbox Manager, open the Switch menu in the faceplate display, and select **Port Threshold Alarm Configuration**. The Port Threshold Alarm Configuration dialog shown in prompts you to enable or disable all alarms, select an event, set triggers, set a sample window and enable or disable an individual alarm. Refer to the Switch Management User's Guide for your switch for more information about port threshold alarms.

To configure port threshold alarms using the command line interface, use the Set Config Threshold command. Refer to the Installation Guide for your switch for more information about the command line interface and the Set Config command.

Notes

Section 3

Alarm Messages

This section describes the alarm message format and lists the alarm messages in message ID sequence. Each alarm message in the list includes a meaning and recommended action.

3.1 Alarm Message Format

Each alarm message has the following format:

```
[ordinal][time_stamp][message_ID][module][message_text]
```

`[ordinal]` – A number assigned to each message in sequence since that last time the alarm history was cleared.

`[time_stamp]` – The time the alarm was issued in the format day-month-hh:mm:ss:ms-yyyy. This time stamp comes from the switch.

`[message_ID]` – A number that identifies the message using the following format: category.message_number

`[module]` – The firmware module that issued the alarm. The firmware modules include SM (Switch Management), EPort, Zoning, and nserver (Nameserver).

`[message_text]` – The alarm message text

3.2 Alarm Messages

You can look up a message by its message ID or by searching for the message text. If the message you are looking for does not appear in this section, contact your authorized maintenance provider.

Locate a Message ID

[A1000.0001] [SM] [Delaying switch reset - switch is busy]

Meaning: The switch is busy and cannot be reset at this time.

Action: Reset the switch again.

[A1000.0005] [SM] [The switch is being reset]

Meaning: The switch is being reset.

Action: None

[A1000.0007] [SM] [The switch is being shutdown]

Meaning: The switch is performing an orderly shutdown.

Action: None

[A1000.0009] [SM] [The switch is now performing an NDCLA]

Meaning: The switch has performed the necessary preparations and is now completing the nondisruptive code load and activation (NDCLA) of firmware.

Action: None

[A1000.0009] [SM] [The switch is proceeding with NDCLA]

Meaning: The switch has performed the necessary preparations and is now completing the nondisruptive code load and activation (NDCLA) of firmware.

Action: None

[A1000.000A] [SM] [The switch will be reset in several seconds due to a config restore]

Meaning: When a complete configuration restore is done on the switch, the switch is reset immediately so the new configuration can take effect.

Action: None

[A1000.000B] [SM] [The switch will be reset and POST will run in several seconds]

Meaning: The switch is being reset as a result of a command from a user interface.

Action: None

[A1000.000B] [SM] [The switch will be reset in several seconds]

Meaning: The switch is being reset as a result of a command from a user interface.

Action: None

A1000.000C] [SM] [The switch will be shutdown several seconds]

Meaning: The switch is being reset as a result of a command from a user interface.

Action: None

[A1000.000D] [SM] [The switch will NDCLA in several seconds]

Meaning: An nondisruptive code load and activation will occur as a result of a Hotreset command from the user interface.

Action: None

[A1000.000F] [SM] [The switch is backing out of NDCLA]

Meaning: Cannot move forward with the nondisruptive code load and activation. All applications and switch resources are backing out of the procedure and returning to normal operation.

Action: Ensure that the fabric is stable and that no changes are being made to switch configurations or connections and try again.

[A1000.0011] [SM] [The switch is being reset while in config edit mode]

Meaning: The switch was reset before pending changes to the switch configuration were saved – all changes were lost.

Action: Save pending changes to the switch configuration before resetting the switch.

[A1000.0012] [SM] [The switch is being reset while in zoning edit mode]

Meaning: The switch was reset before pending zoning changes were saved – all changes were lost.

Action: Save pending zoning changes before resetting the switch.

[A1000.0013] [SM] [The switch is being reset]

Meaning: The switch is being reset.

Action: None

[A1000.0015] [SM] [The switch is being reset while in snmp setup mode]

Meaning: The switch was reset before pending changes to the SNMP configuration were saved – all changes were lost.

Action: Save pending changes before resetting the switch.

[A1000.0016] [SM] [The switch is being reset while in system setup mode]

Meaning: The switch was reset before pending changes to the system setup were saved – all changes were lost.

Action: Save pending changes before resetting the switch.

[A1000.0017] [SM] [The switch is being shutdown while in config edit mode]

Meaning: The switch is performing an orderly shutdown before pending changes to the switch configuration have been saved.

Action: None

[A1000.0018] [SM] [The switch is being shutdown while in zoning edit mode]

Meaning: The switch is performing an orderly shutdown before pending zoning changes have been saved.

Action: None

[A1000.001A] [SM] [The switch is being shutdown while in manufacturing setup mode]

Meaning: The switch is performing an orderly shutdown before pending changes to the manufacturing setup have been saved.

Action: None

[A1000.001B] [SM] [The switch is being shutdown while in snmp setup mode]

Meaning: The switch is performing an orderly shutdown before pending changes to the SNMP configuration have been saved.

Action: None

[A1000.001C] [SM] [The switch is being shutdown while in system setup mode]

Meaning: The switch is performing an orderly shutdown before pending changes to the system setup have been saved.

Action: None

[A1000.001D] [SM] [NDCLA failed and the switch must be reset]

Meaning: The nondisruptive code load and activation has failed and left the switch in an indeterminate state.

Action: Reset the switch.

[A1000.001E] [SM] [The switch is being reset]

Meaning: The switch is being reset.

Action: None

[A1001.0002] [SM] [Invalid user <user> attempted to log into switch]

Meaning: A user made 5 unsuccessful attempts to log in to the switch.

Action: Assess the security risks for your fabric and take appropriate action.

[A1003.0001] [Zoning] [Maximum of <zoneSets> inactive Zones exceeded during merge]

Meaning: The maximum number of zones has been reached.

Action: Reduce the number of zones.

[A1003.0001] [Zoning] [Maximum of <zoneSets> inactive ZoneSets exceeded during merge]

Meaning: The maximum number of zone sets has been reached.

Action: Reduce the number of zone sets.

[A1003.0002] [Zoning] [Maximum of <zoneSets> inactive Aliases exceeded during merge]

Meaning: The maximum number of aliases has been reached.

Action: Reduce the number of aliases.

[A1003.0004] [Zoning] [Maximum of <zoneMembers> total inactive ZoneMembers exceeded during merge]

Meaning: The maximum number of zone members has been reached.

Action: Reduce the number of zone members

[A1003.0005] [Zoning] [Maximum <members> inactive ZoneMembers exceeded for Zone <zone> during merge]

Meaning: The maximum number of zone members has been exceeded as a result of merging fabrics when legacy address formatting was enabled.

Action: Reduce the number of zone members.

[A1003.0006] [Zoning] [Maximum <zone members> inactive ZoneMembers exceeded for Alais <alias> during merge]

Meaning: The maximum number of members has been exceeded for this alias.

Action: Reduce the number of members in this alias.

[A1003.0007] [Zoning] [Maximum of <zones> active Zones exceeded]

Meaning: The maximum number of zones in the active zone set has been exceeded.

Action: Reduce the number of zones in the active zone set.

[A1003.0008] [Zoning] [Maximum of <zoneMembers> total active ZoneMembers exceeded]

Meaning: The maximum total number of zone members for all zones in the active zone set has been exceeded.

Action: Reduce the number of zone members in the active zone set.

[A1003.0009] [Zoning] [Maximum of <zoneMembers> active ZoneMembers for zone <name> exceeded]

Meaning: The maximum number of zone members in this zone has been exceeded.

Action: Reduce the number of zone members in this zone.

[A1003.000C] [Zoning] [Fabric Busy, Failing lock request from domain <domain #>]

Meaning: An attempt was made to activate or deactivate a zone set while another activation or deactivation was is progress.

Action: Retry later.

[A1003.000D] [Zoning] [Failed to lock fabric, lock already held by switch with domain <domain>]

Meaning: Another switch in the fabric already has locked.

Action: The lock must be released on the other switch.

[A1003.000E] [Zoning] [Couldn't acquire lock from domain <domain>]

Meaning: Fabric may be changing, couldn't acquire lock.

Action: Wait for Fabric to stabilize, try again.

A1003.000F] [Zoning] [No memory for command LOCK completion]

Meaning: A zone set activation or deactivation failed because of limited resources.

Action: Retry later.

[A1003.0015] [Zoning] [Zoneset Activation received from switch with domain <domain> failed, Unknown zoneset <zoneset>]

Meaning: A zone set activation received from the named switch failed because the zone set was not in the zoning database.

Action: Examine the named switch to verify that the zoning database is correct.

[A1003.0016] [Zoning] [Dropping lock held by domain <domain>, Merge requests outstanding]

Meaning: Zone merge could not complete in the acceptable time.

Action: Check the status of the switch given domain ID.

[A1003.001B] [Zoning] [Failing SFC, total zoneset limit would be exceeded]

Meaning: The maximum number of zone sets has been exceeded on the switch as a result of a zone merge.

Action: Reduce the number of zone sets on the remote switch.

[A1003.001C] [Zoning] [Failing SFC, total member limit would be exceeded]

Meaning: The maximum number of zone members has been exceeded on the switch due to a zone merge.

Action: Reduce the number of zone members on the remote switch.

[A1003.001D] [Zoning] [Failing SFC, total zones in zonesets limit would be exceeded]

Meaning: The maximum number of zones in zone sets has been exceeded on the switch as a result of a zone merge.

Action: Reduce the number zones on the remote switch.

[A1003.001F] [Zoning] [Failing SFC, member limit for zone <zone name> exceeded, (size= <size>, limit= <limit>)]

Meaning: The maximum number of members for the given zone has been exceeded as a result of a zone merge.

Action: Reduce the number of members in the given zone on the remote switch.

[A1003.0020] [Zoning] [Failing SFC, total zone limit would be exceeded]

Meaning: The maximum number of zones has been exceeded on the switch as a result of a zone merge.

Action: Reduce the number of zones on the remote switch.

[A1003.0021] [Zoning] [Failing SFC, Zoneset is empty].

Meaning: An empty zone set was included as part of a zone merge and was rejected.

Action: Modify the zoning database on the remote switch to remove or correct the empty zone set.

[A1003.0022] [Zoning] [Unable to update zoning DB with newly activated zoneset information]

Meaning: Modifications were being made to the local zoning database while a zone set was being activated or deactivated from a remote switch.

Action: Avoid activating or deactivating a zone set while zoning changes are being made anywhere in the fabric.

[A1003.002D] [Zoning] [Zone Merge response indicates failure to merge, Isolating link]

Meaning: The attempt to merge two fabrics failed because each active zone set contained a zone with the same name, but different membership.

Action: Edit the affected zone to remove the conflict or deactivate one of the zone sets.

[A1003.002E] [Zoning] [Error on zone merge (code= 0x<code>, reason= 0x<reason>)]

Meaning: The attempt to merge two fabrics failed because each active zone set contained a zone with the same name, but different membership.

Action: Edit the affected zone to remove the conflict or deactivate one of the zone sets.

[A1003.003C] [Zoning] [Incompatible Zoning mode]

Meaning: The fabric contains switches with a mix of FC-SW-2 compliance settings.

Action: Configure all switches in the fabric to have the same value for FC-SW-2 compliance.

[A1003.003C] [Zoning] [Switch in Non-SW2 Zoning Mode & SW2 zoning command received, Failing command]

Meaning: The fabric contains switches with a mix of FC-SW-2 compliance settings.

Action: Configure all switches in the fabric to have the same value for FC-SW-2 compliance.

[A1003.003C] [Zoning] [Switch in SW2 Zoning Mode & Non-SW2 merge received]

Meaning: The fabric contains switches with a mix of FC-SW-2 compliance settings.

Action: Configure all switches in the fabric to have the same value for FC-SW-2 compliance.

[A1003.003D] [Zoning] [Fabric lock held by domain <domain>, Checkpoint not permitted]

Meaning: A nondisruptive code load and activation was attempted while a zone set was being activated or deactivated.

Action: Wait for the zone set activation or deactivation to complete before attempting a nondisruptive code load and activation.

[A1003.003D] [Zoning] [Processing zoning requests, Checkpoint not permitted]

Meaning: A nondisruptive code load and activation was attempted while a zoning changes were being made.

Action: Complete zoning changes before attempting a nondisruptive code load and activation.

[A1003.003D] [Zoning] [Reading zoning database, Checkpoint not permitted]

Meaning: A nondisruptive code load and activation was attempted while a zoning changes were being made.

Action: Complete zoning changes before attempting a nondisruptive code load and activation.

[A1004.0000] [Eport] [BBCredits zero, isolating]

Meaning: An ISL failed because there was a mismatch in the number of port buffer credits between the two ports.

Action: Reconfigure the offending port so that the number interoperability credits matches the number of buffer credits on the other switch port.

[A1004.0001] [Eport] [Port in active hard zone, but not in installed.]

Meaning: A hard zone contains a member whose domain ID/port number references an empty slot.

Action: None

[A1004.0003] [Eport] [Bad FSPF Header version received expected <revision> and received <revision>, discarding frame]

Meaning: A non-compliant switch attempted to join the fabric and was rejected.

Action: None

[A1004.0004] [Eport] [Bad checksum on LSR received on port <port num>, lsId= <domain id>]

Meaning: A checksum failure on a Link State Record is indicated. The record is not acknowledged and the record is re-sent by the remote switch.

Action: None

[A1004.0005] [Eport] [Dead Hello Interval has expired for switch <domain id> on port <port num>]

Meaning: This switch has not received a hello from the remote switch for 80 seconds. Discard routes learned via this link and renegotiate.

Action: None

[A1004.0008] [Eport] [Eport Isolating due to ELP Incompatibility]

Meaning: An E_Port isolated due to an ELP (Exchange Link Parameter) incompatibility.

Action: Review accompanying alarms for specific cause.

[A1004.0009] [Eport] [Eport Isolating due to ESC Incompatibility]

Meaning: An E_Port isolated because the connecting switch failed to support the standard routing protocol FSPF.

Action: Connect a compatible switch.

[A1004.000A] [Eport] [Eport Isolating due to EFP Domain Overlap]

Meaning: An E_Port isolated because each fabric has a switch with the same domain ID.

Action: Change the domain ID on one of the conflicting switches.

[A1004.000B] [Eport] [Eport Isolating due to Switch Administratively Offline]

Meaning: An E_Port isolated because the local switch has been placed offline.

Action: Configure the administrative state to Online to establish the link.

[A1004.000C] [Eport] [Eport Isolating due to Domain ID Locked, Domain ID unavailable]

Meaning: An E_Port isolated because the requested domain ID matches another in the fabric and assigning an alternative is prohibited by the Domain ID Lock parameter.

Action: Disable the domain ID lock parameter or reconfigure the domain IDs.

[A1004.000D] [Eport] [Eport Isolating due to RDI SW Reject]

Meaning: An E_Port isolated because the principal switch rejected the local switch domain ID.

Action: Change the domain ID so that it is unique in the fabric.

[A1004.000E] [Eport] [Eport Isolating due to RDI Domain out of Range]

Meaning: An E_Port isolated because the principal switch rejected the local switch domain ID as being out of range (1-239).

Action: Change the domain ID to a valid number.

[A1004.000F] [Eport] [Eport Isolating due to Merge Zone Failure]

Meaning: An ISL failed because the two active zone sets each have a zone with the same name, but different members.

Action: Modify one or both of the zones so that their membership is the same, or deactivate one of the active zone sets. To connect the two fabrics, reset the affected E_Ports.

[A1004.0010] [Eport] [Eport Isolating due to Remote switch using same domain ID]

Meaning: An E_Port isolated because the remote switch has the same domain ID.

Action: Change the domain ID on one of the switches.

[A1004.0011] [Eport] [Eport Isolating due to Remote switch Isolated]

Meaning: An E_Port isolated because the remote switch has the same domain ID.

Action: Change the domain ID on one of the switches.

[A1004.0013] [Eport] [Eport Isolating due to No Principal Present]

Meaning: An E_Port isolated because the principal priority on all switches is set to 254.

Action: Configure one of the switches to be the principal switch by changing the principal priority.

[A1004.0014] [Eport] [Eport Isolating due RDI ELP TOV Mismatch]

Meaning: An E_Port isolated because the R_A_TOV or E_D_TOV time out values are different on the two switches.

Action: Modify the switch configurations so that R_A_TOV or E_D_TOV values are the same.

[A1004.0017] [Eport] [Interop credit change, resetting port.]

Meaning: The number of interoperability credits has been changed on a port and the port is reinitializing.

Action: None

[A1004.0018] [Eport] [InteropCredit configured at <credits>, <credits> BB Credits available. Configure ExtCredit to increase.]

Meaning: The number of interoperability credits is set higher than the available number of port buffer credits.

Action: Extend credits on this port to match or exceed the number of interoperability credits.

[A1004.0019] [Eport] [Link unstable. Link init will be held back until link up time is 5 seconds]

Meaning: An ISL has become unstable as a result of a state change. The switch will delay reinitializing the E_Port by 5 seconds to allow the link to stabilize.

Action: None

[A1004.001A] [Eport] [ELP indicates E-Port command not supported on remote port, Isolating]

Meaning: An E_Port isolated because the port on the remote switch could not configure itself as an E_Port.

Action: Change the port type on the remote switch to G_Port or GL_Port.

[A1004.001B] [Eport] [ELP indicates invalid Revision]

Meaning: Revision number supplied on ELP does not match value indicated in FC-MI interoperability document.

Action: Install new firmware.

[A1004.001C] [Eport] [ELP indicates class of service parameter error]

Meaning: An E_Port isolated because the switch firmware versions are incompatible.

Action: Connect a compatible switch.

[A1004.001D] [Eport] [Bad ELP packet received]

Meaning: An E_Port isolated because the switch received a bad frame from the connecting switch.

Action: Install new firmware or replace the switch.

[A1004.001D] [Eport] [ELP indicates invalid Flow Control]

Meaning: An E_Port isolated because of invalid flow control.

Action: Inspect the switches to insure that the FC-SW-2 compliance setting is the same. Reconfigure the switches if necessary.

[A1004.001D] [Eport] [Invalid Flow Control indicated on ELP]

Meaning: An E_Port isolated because of invalid flow control.

Action: Inspect the switches to insure that the FC-SW-2 compliance setting is the same. Reconfigure the switches if necessary.

[A1004.001D] [Eport] [Remote switch core PID mode mismatch]

Meaning: An E_Port isolated because the LegacyAddressFormat parameter is not the same on both switches.

Action: Modify the switch so that the LegacyAddressFormat parameter is the same on both switches.

[A1004.001E] [Eport] [Received invalid ELP revision, expecting <revision> and received <revision>]

Meaning: Revision number supplied on ELP does not match value indicated in FC-MI interoperability document.

Action: Install compatible firmware.

[A1004.001F] [Eport] [Max Payload size mismatch indicated on ELP]

Meaning: An E_Port isolated because the remote switch uses an incompatible frame size.

Action: Connect to a compatible switch.

[A1004.0020] [Eport] [R_A_TOV mismatch indicated on ELP]

Meaning: An E_Port isolated because the R_A_TOV timeout values on the two switches do not match.

Action: Modify R_A_TOV so that it is the same on both switches. The recommended value is 10 seconds.

[A1004.0021] [Eport] [E_D_TOV mismatch indicated on ELP]

Meaning: An E_Port isolated because the E_D_TOV timeout values on the two switches do not match.

Action: Modify E_D_TOV so that it is the same on both switches. The recommended value is 2 seconds.

[A1004.0022] [Eport] [EFP indicates Domain id <domain> assigned to different switches]

Meaning: An E_Port isolated because two switches in the fabric have the same domain ID.

Action: Modify the switches so that all domain IDs are unique.

[A1004.0023] [Eport] [Attempting to connect to switch with incompatible TOV]

Meaning: An E_Port isolated because the values for R_A_TOV or E_D_TOV are not the same on both switches.

Action: Modify the switches so that the time out values are the same.

[A1004.0024] [Eport] [Attempting to connect to switch that is in non-interoperability mode]

Meaning: An attempt was made to connect to a switch with a different value for FC-SW-2 compliance.

Action: Modify the FC-SW-2 compliance values so that they are the same on both switches.

[A1004.0025] [Eport] [ESC RJT received]

Meaning: An attempt has been made to connect to another switch that rejected the ESC (Exchange Switch Capabilities) request for a reason other than command not supported.

Action: Install compatible firmware.

[A1004.0026] [Eport] [Configured domain id <domain id number> not available]

Meaning: An attempt was made to connect a switch to a fabric with a conflicting domain ID and the domain ID could not be reassigned.

Action: Change the domain ID so that it is unique in the fabric or disable the domain ID lock so that the domain ID can be automatically reassigned.

[A1004.0027] [Eport] [Requested domain id <domain id> not available]

Meaning: The requested domain ID was rejected by the principal switch and a different domain ID could not be assigned.

Action: Change the domain ID or disable the domain ID lock parameter to allow dynamic reassignment of the domain ID.

[A1004.0028] [Eport] [Reinitiating link, tov value is changing.]

Meaning: Someone reconfigured a E_D_TOV or R_A_TOV. The link will be reinitialized so the TOV is renegotiated.

Action: None

[A1004.0029] [Eport] [No Switch capable of being Principal Switch]

Meaning: An E_Port isolated because the principal priority on all switches is set to 254.

Action: Configure one of the switches to be the principal switch by changing the principal priority.

[A1004.002A] [Eport] [Broadcast Frame Received & broadcast disabled, not forwarding to fabric.]

Meaning: A mix of Broadcast parameter values among switches in the fabric compromised the integrity of the broadcast.

Action: Set the Broadcast parameter to the same value for all switches in the fabric.

[A1004.002B] [Eport] [Port <port number> not configured for E-Port capability]

Meaning: An attempt was made by a remote switch to connect through a port that could configure itself as an E_Port.

Action: Change the port type on the remote switch to G_Port or GL_Port.

[A1004.002C] [Eport] [Checkpoint prohibited, build fabric in progress.]

Meaning: A nondisruptive code load and activation was attempted during fabric configuration.

Action: Wait for the fabric configuration to complete, then retry the nondisruptive code load and activation.

[A1004.002C] [Eport] [Checkpoint prohibited, domain id assignment in progress.]

Meaning: A nondisruptive code load and activation was attempted during fabric configuration.

Action: Wait for the fabric configuration to complete, then retry the nondisruptive code load and activation.

[A1004.002D] [Eport] [Noninterop Legacy switch setting makes domain/port zoning non-interoperable]

Meaning: Zone members involving non-QLogic switches cannot be defined by domain ID and port number when FC-SW-2 Compliance is disabled and Legacy Address Formatting is enabled.

Action: Disable (False) the Legacy Address Formatting, enable FC-SW-2 compliance, or reassign the zone members using a method other than domain ID and port number.

[A1004.0030] [Eport] [Topology change, lost route to switch with domain <domain>]

Meaning: Connection was lost to a switch in the fabric.

Action: Inspect switch connections and device hardware for proper operation. Review accompanying alarms for other causes.

[A1005.0000] [SM] [Automatically changing zoning merge mode configuration to NonSW2]

Meaning: FC-SW-2 compliance is being disabled.

Action: None

[A1005.0000] [SM] [Cannot activate a configuration - CMON not responding]

Meaning: The CMON application is not responding indicating a resource problem on the switch.

Action: Reset the switch.

A1005.0000] [SM] [Illegal Active Zone name <name> read from zoning app]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

A1005.0000] [SM] [Illegal Alias name <alias name> read from DS]

Meaning: The alias name is illegal and the alias will not be added to the zoning database.

Action: Rename the alias. An alias name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Alias name <alias name> read from ZONING_ALIAS_MEMBER_READ]

Meaning: The alias name is illegal and the alias will not be added to the zoning database.

Action: Rename the alias. An alias name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Alias name <name> read from zoning merge]

Meaning: An illegal alias name was encountered during a zoning merge.

Action: Rename the alias. An alias name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from DS]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from zoning merge]

Meaning: An illegal zone name was encountered during a zoning merge.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from ZONING_ZONE_MEMBER_READ]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from ZONING_ZONESET_ZONE_READ]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from ZONING_ZONE_TYPE_READ]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal Zone name <name> read from ZONING_ZONE_TYPE_READ]

Meaning: The zone name is illegal and the zone will not be added to the zoning database.

Action: Rename the zone. A zone name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal ZoneSet name <name> read from zoning merge]

Meaning: An illegal zone set name was encountered during a zoning merge.

Action: Rename the zone set. A zone set name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Illegal ZoneSet name <zoneset> read from DS]

Meaning: The zone set name is illegal and the zone set will not be added to the zoning database.

Action: Rename the zone set. A zone set name can be up to 64 characters. Valid characters are 0-9, A-Z, a-z, _, $, ^, and -.

[A1005.0000] [SM] [Switch Management reports problem with dequeueReq()]

Meaning: Switch management has experienced a problem; there could be a resource problem on the switch.

Action: Reset the switch.

[A1005.0000] [SM] [Switch Management reports problem with dequeueReq()]

Meaning: Switch management has experienced a problem; there could be a resource problem on the switch.

Action: Reset the switch.

[A1005.0004] [FC2] [Error reading configuration]

Meaning: Alarm if a frame to or from a Well Known Address is rejected because of lack of buffer to buffer credit.

Action: Check credit configuration, possibly reconfigure.

[A1005.0006] [SM] [Request from <wwn> on port 0x<source id>>, failed authentication, sending reject]

Meaning: Management server authentication is enabled, and the received frame failed authentication.

Action: None

[A1005.000A] [nserver] [Warning: ignoring zone member %d,%d, can't map port to area for node WWN %s]

Meaning: Couldn't map port to area, failed.

Action:

[A1005.000B] [nserver] [Port to area mapping for one member %d,%d now valid]

Meaning: Successfully mapped port to area.

Action:

[A1005.000C] [nserver] [Requested credit not granted for port % d, donors at time, %s]

Meaning: Insufficient credits were available in the credit pool to grant the credit request.

Action: Decrease the number of requested credits or add more donor ports.

[A1005.000D] [nserver] [Insufficient extended credit pool error, no credit granted for port: <port>]

Meaning: Insufficient credits were available in the credit pool to grant the credit request.

Action: Decrease the number of requested credits or add more donor ports.

[A1005.000E] [nserver] [Can't extend credit on loop capable ports]

Meaning: Loop ports cannot borrow credits from the credit pool.

Action: Change the port type to G_Port or F_Port.

[A1005.0012] [Port] [Loop device <al_pa> did not take OPN off loop, removing it from nameserver.]

Meaning: The named loop device failed or has been removed.

Action: Reinstall or replace the device.

[A1005.0013] [SM] [Hot-swap had failed before last reset - MUST power cycle switch]

Meaning: The I/O blade hot-swap procedure failed and the switch was reset instead of power cycled.

Action: Power cycle the switch.

[A1005.0013] [SM] [Hot-swap procedure failed - MUST power cycle switch]

Meaning: The blade hot-swap procedure failed or the procedure was not followed correctly.

Action: Power cycle the switch.

[A1005.0013] [SM] [Hot-swap procedure never completed - MUST power cycle switch]

Meaning: The I/O blade hot-swap procedure was not completed.

Action: Power cycle the switch.

[A1005.0014] [SM] [Retrying port <port> that was DISABLED due to excessive errors]

Meaning: The switch is attempting to bring a port online that was previously disabled due to excessive errors.

Action: None

[A1005.0015] [SM] [Port <port> was DISABLED before NDCLA due to excessive errors - still DISABLED]

Meaning: A port was automatically disabled due to excessive errors before the nondisruptive code load and activation and remains disabled afterwards.

Action: None

[A1005.0016] [SM] [Management Server cannot map RIELN (invalid SML symbols) to Switch Symbolic Name]

Meaning: The management server registered an Interconnect Element Logical Name (IELN) containing characters that cannot be mapped to the switch symbolic name. The IELN and the switch symbolic name do not match.

Action: Remove #, semicolon (;), and comma (,) characters from the IELN.

[A1005.0021] [SM] [Configuration is being restored - this could take several minutes !]

Meaning: Switch management is restoring the switch configuration.

Action: None

[A1005.0023] [SM] [Network setup is changing - may lose connection - admin being released automatically]

Meaning: A System ActSetup command is being processed; a new network configuration is activated.

Action: None

[A1005.0024] [SM] [Switch should be reset after leaving the Diagnostics AdminState]

Meaning: After changing the switch administrative state from Diagnostics to any other state, the switch must be reset to complete the state change.

Action: Reset the switch.

[A1005.0025] [SM] [Admin mode for user <user> was canceled by user <user>]

Meaning: The current Admin session was cancelled by another user.

Action: None

[A1005.0027] [SM] [Zoning database of over 3000 zone members may damage certain non-QLogic switches !]

Meaning: More than 3000 zone members in the zoning database could cause problems with other vendors' switches.

Action: None

[A1005.0028] [SM] [Zoning edit session has been preempted by a zoning merge !]

Meaning: Zoning changes were being made when fabrics were merged - all changes were lost.

Action: Close the Zoning edit session.

[A1005.002E] [SM] [Attempted Feature upgrade of features already installed]

Meaning: An attempt was made to repeat an upgrade that has already been installed.

Action: None

[A1005.002F] [SM] [Attempted Licensed Port upgrade of ports that are already licensed]

Meaning: An attempt was made to repeat an upgrade that has already been installed.

Action: None

[A1005.0030] [SM] [Upgrading Licensed Ports to <ports>]

Meaning: The switch is being upgraded to license the indicated total number of ports.

Action: None

[A1005.0031] [Eport] [Invalid vendor data from media device for port <port>]

Meaning: Alarm if a frame to or from a WKA is rejected because of lack of buffer to buffer credit

Action: None

[A1006.0004] [nserver] [NS: ACL overlap between <wwn> (x<port_id>) and <wwn> (x<port_id>) (ACL <domain>,<port>)]

Meaning: The named zone members cannot communicate because they are members of different ACL hard zones.

Action: Place both zone members in the same ACL hard zone or exclude both from ACL hard zones.

[A2000.0002] [Pwr1 failure - ALARM SET]

Meaning: Power supply #1 has failed or has been removed.

Action: Contact customer support.

[A2000.0002] [Pwr2 failure - ALARM SET]

Meaning: Power supply #2 has failed or has been removed.

Action: Contact customer support.

[A3014.0001] [SM] [Blade in slot <slot> set Down due to failure of all AuxPorts]

Meaning: The I/O blade in the named slot has isolated because all auxiliary ports to the cross-connect blades have failed.

Action: Contact customer support.

[A3014.0002] [SM] [Blade in slot <slot> set Online due to recovery of at least one AuxPort]

Meaning: The I/O blade in the named slot has recovered at least one auxiliary port to a cross-connect blade and is no longer isolated.

Action: None

[A3015.0001] [SM] [I/O blade in slot <slot> has been inserted into chassis]

Meaning: An I/O blade has been installed in the named slot.

Action: None

[A3016.0001] [SM] [I/O blade in slot <slot> has been removed from chassis]

Meaning: The I/O blade has been removed from the named slot.

Action: None

[A4000.0001] [SM Port: <port no.>] [Login attempts <attempts> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of device logins on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A4001.0001] [SM Port: <port no.>] [Logout attempts of <attempts> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of device logouts on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A4002.0001] [SM Port: <port no.>] [CRC errors of <errors> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of CRC errors on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A4003.0001] [SM Port: <port no.>] [LOS errors of <errors> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of loss-of-synch errors on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A4004.0001] [SM Port: <port no.>] [Decode errors of <errors> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of decode errors on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A400D.0001] [SM Port: <port no.>] [ISL transitions of <transitions> hit rising trigger <trigger> in <window> second window on port <port no.> - ALARM SET]

Meaning: The number of ISL connects/disconnects on the named port has exceeded the specified rising trigger.

Action: Review the port alarm threshold configuration and make any necessary corrections. Inspect the port, transceiver, cable, and device for proper operation.

[A4080.0001] [SM Port: <port no.>] [Login attempts <attempts> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of device logins on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

[A4081.0001] [SM Port: <port no.>] [Logout attempts of <attempts> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of device logouts on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

[A4082.0001] [SM Port: <port no.>] [CRC errors of <errors> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of CRC errors on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

[A4083.0001] [SM Port: <port no.>] [LOS errors of <errors> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of loss-of-synch errors on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

[A4084.0001] [SM Port: <port no.>] [Decode errors of <errors> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of decode errors on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

[A4085.0001] [SM Port: <port no.>] [ISL transitions of <transitions> hit falling trigger <trigger> in <window> second window on port <port no.> - ALARM CLEARED]

Meaning: The number of ISL connects/disconnects on the named port has decreased below the falling trigger clearing the previous rising trigger alarm.

Action: None

Notes